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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Crabtree et al.

Serial No: 10/040,430

Filed: January 7, 2002

For: NF-AT Polypeptides and  
Polynucleotides and Screening Methods  
for Immunosuppressive Agents

TECH CENTER 1600/290

7/2  
Attorney Docket No. APBI-P05-008

Art Unit: 1656

Examiner: N/A

**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

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**INFORMATION DISCLOSURE STATEMENT IN COMPLIANCE WITH 37**

**CFR §§ 1.97(b) and 1.98(d)**

Submitted herewith on Form PTO-1449 is a list of publications that applicants and their agents/attorneys have identified during the preparation of this application. In accordance with CFR § 1.98 (d), applicants respectfully submit that *no copy* of any patent, publication, or other information listed on the enclosed Form PTO 1449 is needed because the citations were made in prior application U.S.S.N. 09/232,346, filed January 15, 1999 which is relied upon for an earlier filing date under 35 U.S.C. 120.

This Information Disclosure Statement is being filed before the mailing of the first office action on the merits; therefore, no fee is due.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached Form 1449.

This submission does not represent that a search has been made or that no better art exists. Nor does it constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

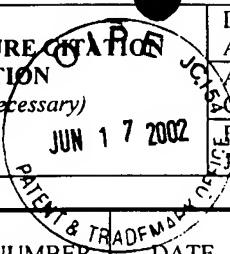
The Information Disclosure Statement submitted herewith is being filed before the mailing date of a first Office Action on the merits, and as such applicants believe no fees are due at this time. However, should any fees need to be paid in connection with this submission, the Commissioner is hereby authorized to credit any overpayment or charge any deficiency to/from **Deposit Account No. 18-1945**, under Order No. APBI-P05-008.

Respectfully submitted,  
Ropes & Gray

By: 

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Reg. No. 36,709

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Form PTO-1449 <b>INFORMATION DISCLOSURE STATEMENT</b> IN AN APPLICATION (Use several sheets if necessary)			Docket Number (Optional) APBI-P05-008		Application Number 10/040,430	
			Applicant Crabtree et al.		Group Art Unit 1656	
			Filing Date January 7, 2002			
<b>U.S. PATENT DOCUMENTS</b>						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA 6,171,781	1/9/01	Crabtree et al.			
	AB 6,150,099	11/21/00	Crabtree et al.			
	AC 6,096,515	8/1/00	Crabtree et al.			
	AD 5,837,840	11/17/98	Crabtree et al.			
	AE 5,656,452	8/12/97	Rao et al.			
<b>FOREIGN PATENT DOCUMENTS</b>						
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES NO
COPY OF PAPERS ORIGINALLY FILED	AF	WO 95/08554	3/30/95	PCT		
	AG	WO 95/02053	1/19/95	PCT		
	AH	WO 94/15964	7/21/94	PCT		
	AI	WO 93/04203	3/4/93	PCT		
<b>OTHER DOCUMENTS</b> (Including Author, Title, Date, Pertinent Pages Etc.)						
	AJ	Arai et al. U. S. Application No. 08/148,061 filed 11/5/93.				
	AK	Arai et al. U. S. Application No. 08/113,971 filed 8/30/93.				
	AL	Arai et al. U. S. Application No. 08/099,998 filed 7/30/93.				
	AM	Arai et al. U. S. Application No. 08/088,483 filed 7/6/93.				
	AN	Banerji, S. et al. The immunosuppressant FK-506 specifically inhibits mitogen-induced activation of the interleukin-2 promoter and the isolated enhancer elements NFIL-2A and NF-AT1. <i>Mol. Cell. Biol.</i> 11, 4074-4087 (1991).				
	AO	Bierer, B. et al. Two distinct signal transmission pathways in T lymphocytes are inhibited by complexes formed between an immunophilin and either FK506 or rapamycin. <i>PNAS</i> 87, 9231-9235 (1990).				
	AP	Clipstone, N. & Crabtree, G. Calcineurin is a key signaling enzyme in T lymphocyte activation and the target of the immunosuppressive drugs cyclosporin A and FK506. <i>Ann. N. Y. Acad. Sci.</i> 696, 20-30 (1993).				
	AQ	Clipstone, N. & Crabtree, G. Identification of calcineurin as a key signaling enzyme in lymphocyte activation. <i>Nature</i> 357, 695-697 (1992).				
	AR	Crabtree, G. Contingent genetic regulatory events in T lymphocyte activation. <i>Science</i> 243, 355-361 (1989).				

Form PTO-1449

## INFORMATION DISCLOSURE CITATION

## IN AN APPLICATION

(Use several sheets if necessary)

Docket Number (Optional)

APBI-P05-008

Application Number

10/040,430

Applicant

Crabtree et al.

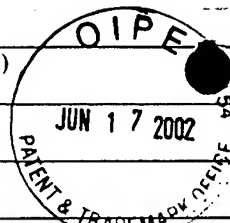
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Crabtree, G. Pathways of T lymphocyte activation. *Abstract of NIH Grant No. R01CA39612* (1998).

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Crabtree, G. Pathways of T lymphocyte activation. *Abstract of NIH Grant No. R01CA39612* (1994).

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Crabtree, G. & Clipstone, N. Signal transmission between plasma membrane and nucleus of T lymphocyte. *Ann. Rev. Biochem.* 63, 1045-1083 (1994).

AV

Durand, D. et al. Characterization of antigen receptor response elements within the interleukin-2 enhancer. *Mol. Cell. Biol.* 8, 1715-1724 (1988).

AW

Emmel, E. et al. Nuclear association of a T-Cell transcription factor blocked by FK-506 and cyclosporin A. *Nature* 352, 803-807 (1991).

AX

Flanagan, W. et al. Nuclear association of a T-cell transcription factor blocked by FK506 and cyclosporin A. *Nature* 352, 803-807 (1991).

AY

Ho, S. et al. Cloning and characterization of NF-ATc and NF-ATp: the cytoplasmic components of NF-AT. *Adv. Exp. Med. Biol.* 365, 167 (1994).

AZ

Israel, A. NF-AT comes under control. *Nature* 369, 443-444 (1994).

BA

Jain et al. Analysis of the preexisting and nuclear forms of nuclear factor of activated T cells. *J. Immunol.* 151, 837-848 (1993).

BB

Jain, J. et al. Nuclear factor of activated T cells contains Fos and Jun. *Nature* 356, 801-804 (1992).

BC

Jain et al. The T cell transcription factor NF-ATp is a substrate for calcineurin and interacts with Fos and Jun. *Nature* 365, 352-355 (1993).

BD

Jin, Y. et al. Molecular cloning of a membrane-associated human FK-506 and rapamycin-binding protein FKBP-13. *PNAS* 88, 6677-6681 (1991).

BE

Matilla, P. et al. The actions of cyclosporin A and FK506 suggest a novel step in the activation of T lymphocytes. *EMBO J.* 9, 4425-4433 (1990).

BF

McCaffrey et al. Isolation of the cyclosporin-sensitive T cell transcription factor NF-ATp. *Science* 262, 750-754 (1993).

BG

McCaffrey et al. NF-ATp, a T lymphocyte DNA-binding protein that is a target for calcineurin and immunosuppressive drugs. *J. Biol. Chem.* 268, 3747-3752 (1993).

BH

Northrop et al. Characterization of the nuclear and cytoplasmic components of the lymphoid-specific nuclear factor of activated T cells (NF-AT) complex. *J. Biol. Chem.* 268, 2917-2923 (1993).

BI

Northrop et al. NF-AT components define a family of transcription factors targeted in T-Cell Activation. *Nature* 369, 497-502 (1994).COPY OF PAPERS  
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Form PTQ-1449 <b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> (Use several sheets if necessary)		Docket Number (Optional) APBI-P05-008	Application Number 10/040,430
		Applicant Crabtree et al.	
		Filing Date January 7, 2002	Group Art Unit 1656
	BJ	Rao, A. NF-AT: a transcription factor required for the co-ordination of several cytokine genes. <i>Immunology Today</i> 15, 274-281 (1994).	
	BK	Rao et al. U.S. Application No. 08/145,006, filed 5/11/93.	
	BL	Rao et al. U.S. Application No. 08/017,052 filed 2/11/93.	
	BM	Rao et al. U. S. Application No. 08/006,067 filed 1/15/93.	
	BN	Riegel, J. et al. Nuclear Events after activation of CD4+8+ thymocytes. <i>J. Immunol.</i> 144, 6-3611-3618 (1990).	
	BO	Shaw, J. et al. Identification of a putative regulator of early T cell activation genes. <i>Science</i> 241, 202-225 (1988).	
	BP	Schmidt, A. et al. Inducible Nuclear Factor Binding to the kB elements of the human immunodeficiency virus enhancer in T cells can be blocked by cyclosporin A in a signal-dependent manner. <i>J. Virology</i> 64, 4037-4041 (1990).	
	BQ	Schreiber, S. Chemistry and biology of the immunophilins and their immunosuppressive ligands. <i>Science</i> 251, 283-287 (1991).	
	BR	Verweij, C. et al. Cell type specificity and activation requirements for NF-AT-1 (Nuclear Factor of Activated T-cells) transcriptional activity determined by a new method using transgenic mice to assay transcriptional activity of an individual nuclear factor. <i>J. Biol. Chem.</i> 265, 15788-15795 (15 September 1990).	
EXAMINER		DATE CONSIDERED	
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.			

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